

CLAIMS

What is claimed is:

1. A caulking gun comprising a gun rack, a gun body connected to the gun rack, and a push rod configured to traverse through the gun rack and the gun body;
5 wherein said gun rack includes a trigger, a driving section, a jointing section and a fixed handle; said jointing section is provided at a distal end of the gun rack and defines a hole for receiving at least one coupling component; said driving section includes a driving girder, a driving chamber, a braking bolt and a braking bulge and is located proximally with respect to said jointing section; said fixed handle is located
10 under the driving chamber, said driving girder is provided between the fixed handle and the jointing section and a pin hole for pin jointing the trigger to the driving girder is defined thereon; said braking bolt and said braking bulge protrude proximally from a back wall of the driving chamber and a push rod through hole for allowing the push rod to pass through is defined on the back wall between the braking bolt and the
15 braking bulge;
said trigger is pin jointed on the driving girder of the gun rack via the pin hole;
said caulking gun further comprising:
a front block at a distal end of the gun body for supporting a caulk cartridge nozzle, a back block at a proximal end of the gun body and defining an assembling
20 hole for coupling with at least one coupling component, said gun body is fixed to the gun rack by the at least one coupling component which defines a through hole for traversal of said push rod there through;

a forward push element is fixed at the front end of the said push rod; a position-limiting tube, a driving element and a driving spring are provided within the driving chamber and surround the push rod; said driving element is moved distally by a driving shaft as the trigger is moved proximally, said driving element compressing the driving spring as it moves distally; a braking assembly including braking element
5 caught by the braking bolt prevents movement of the push rod, said braking bulge acts as a fulcrum for the braking element.

2. The caulking gun as in claim 1, further comprising a bulge protruding
10 proximally from said fixed handle from a mid to upper portion thereof, a protruding rib formed on a surface of the said fixed handle, and means for securing a caulk-cleaning needle to the protruding rib.

3. The caulking gun as in claim 1, wherein the trigger includes a portion
15 configured and dimensioned for grasping by a user's hand, and an upper part of the trigger is formed as two parallel driving arms which is movably connected to the driving girder of the gun rack.

4. The caulking gun as in claim 3, wherein the driving shaft is connected to
20 the two driving arms on a top end of the trigger, said caulking gun further comprising a cutting member connected to the top end of the trigger and having a blade capable of moving along a path upon movement of the trigger for cutting an object positioned

within a cutting hole of the gun rack.

5 5. The caulking gun as in claim 1, wherein a female rabbet is provided at the distal end of the said jointing section and is concentric with said hole for receiving a male tab gasket.

6. The caulking gun as in claim 5, wherein a gasket is provided between said back block of the gun body and the at least one coupling component, and wherein said male tab gasket is provided between the back block and the gun rack and matches
10 with the female rabbet at the distal end of the jointing section.

7. The caulking gun as in claim 1, wherein said driving chamber is a quadrate chamber formed with two parallel jambs on either side of said hole.

15 8. In a caulking gun of the type having a gun rack, a gun body, and a push rod configured to traverse through the gun rack and the gun body, the gun rack having a fixed handle and a trigger for causing distal movement of the push rod as it moves towards the fixed handle, the improvement comprising:

20 a female rabbet at a distal end of the gun rack and being concentric with a hole defined by the gun rack for passage of said push rod through said female rabbet and gun rack, said female rabbet configured for receiving a male tab gasket provided between the gun body and the gun rack for connecting the gun body and the gun rack,

said male tab gasket matches the female rabbet for securing said female rabbet and male tab gasket.

9. In the caulking gun as in claim 8, the improvement further comprising a
5 quadrate driving chamber formed with two parallel jambs on either side of said hole.

10. In the caulking gun as in claim 8, the improvement further comprising a
bulge protruding proximally from said fixed handle from a mid to upper portion
thereof, a protruding rib formed on a surface of the said fixed handle, and means for
10 securing a caulk-cleaning needle to the protruding rib.

11. In the caulking gun as in claim 8, the improvement further comprising
the trigger being ergonomically designed by having a curving portion configured and
dimensioned for grasping by a user's hand.
15

12. In the caulking gun as in claim 8, the improvement further comprising a
cutting member connected to the top end of the trigger and having a blade capable of
moving along a path upon movement of the trigger for cutting an object positioned
within a cutting hole of the gun rack.

20

13. In the caulking gun as in claim 8, the improvement further comprising a
caulk cleaning needle and means for securing said caulk-cleaning needle to said gun

rack.

14. In a caulking gun of the type having a gun rack, a gun body, and a push rod configured to traverse through the gun rack and the gun body, the gun rack having
5 a fixed handle and a trigger for causing distal movement of the push rod as it moves towards the fixed handle, the improvement comprising:

a quadrate driving chamber at a distal end of the gun rack and formed with two parallel jambs on either side of a hole dimensioned for passage of said push rod there through.

10

15. In the caulking gun as in claim 14, the improvement further comprising a female rabbet at a distal end of the gun rack and being concentric with the for passage of said push rod through, said female rabbet configured for receiving a male tab gasket provided between the gun body and the gun rack which matches the female
15 rabbet for securing said female rabbet and male tab gasket for connecting the gun body and the gun rack.

16. In the caulking gun as in claim 14, the improvement further comprising a bulge protruding proximally from said fixed handle from a mid to upper portion
20 thereof, a protruding rib formed on a surface of the said fixed handle, and means for securing a caulk-cleaning needle to the protruding rib.

17. In the caulking gun as in claim 14, the improvement further comprising the trigger being ergonomically designed by having a curving portion configured and dimensioned for grasping by a user's hand.

5 18. In the caulking gun as in claim 14, the improvement further comprising a cutting member connected to the top end of the trigger and having a blade capable of moving along a path upon movement of the trigger for cutting an object positioned within a cutting hole of the gun rack.

10 19. In the caulking gun as in claim 14, the improvement further comprising a caulk cleaning needle and means for securing said caulk-cleaning needle to said gun rack.